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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,625	11/26/2003	Radislav Potyrailo	138961-1	6454

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EXAMINER

WU, SHEAN CHIU

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/723,625

Applicant(s)

POTYRAILO ET AL.

Examiner

Shean C. Wu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-23,25-29,32-35 and 37-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6,8-23 and 25-29 is/are allowed.
- 6) ☒ Claim(s) 32-35 and 37-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/18 & 10/17/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The indicated allowability of claim 35 and 37-40 is withdrawn in view of the newly discovered reference(s) to Lucht et al. Rejections based on the newly cited reference follow.

Claim Rejections - 35 USC § 112

2. Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim is vague because the claim is claimed as a method claimed and a product claim. If Applicants intend to claim a product (an authenticable article) they should claim so. The product claim (optical disk) is already claimed in claim 37.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 32-35 and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lucht et al. (US2002/0149003).

The reference discloses a thermochromic polymer-based temperature indicator composition, which comprises a polythiophene (0.05 to 5.0% by weight based on the

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total weight of the composition) and carrier medium. The thermochromic polymer-based can be incorporated via injection molding or extrusion into commercially plastics (substrate polymer) such as poly (ethylene terephthalate) (PET), polystyrene, polyethylene (HDPE and LDPE), other polyolefins, polydienes, polycarbonates, polyacrylics, polyacrylic acids, polyacrylamides, polymethacrylics, polyvinyl ethers, polyvinyl halides, poly (vinyl nitrile) poly vinyl esters, polyesters, polysofones, polysulfonamides, polyamides, polyimines, polyimides, carbohydrates, and polymer mixtures and copolymers. Also, see the claims 10 and 13. The reference plastics retain a visually retrievable thermochromic response with pigment loadings of about 0.5% polymer-based pigment. The polythiophene of the reference exhibits the color change at different temperature, which can act as a thermochromic compound. The sensor system can be used as safety applications (see col. 3, lines 31-41).

The present claims differ from the reference in that the reference does not disclose an optical disk prepared by authenticable polymer, however, it is well known that the transparent polycarbonate is useful for an optical disk material having a recording layer either one side or double side substrates (see US 5,648,197). Therefore, it would have been obvious to those skilled in the art to utilize the thermochromic material of the reference and incorporate with substrate polymer such as polycarbonate to arrive at the claimed invention because it is known to use thermochromic materials to verify the authenticity (US 6,610,351, 6,413,305 and 6,364,363).

Allowable Subject Matter

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3. Claims 1-6, 8-23 and 25-29 are allowed.

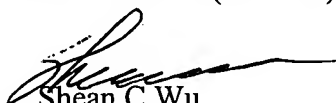
Response to Arguments

4. Applicant's arguments filed 8/10/05, with respect to the rejections of claims in the previous office action have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Lucht et al.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shean C. Wu whose telephone number is 571-272-1393. The examiner can normally be reached on 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Shean C Wu
Primary Examiner
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